IN THE CLAIMS

Please substitute the following listing of claims for the previous listing of claims.

1. (Previously presented) A substrate processing chamber component capable of being exposed to a RF or microwave energized gas in a substrate processing chamber, the component comprising a metal alloy comprising yttrium and aluminum, the metal alloy having an anodized surface coating formed by applying an electrical bias power to the metal alloy, wherein the anodized surface coating comprises an yttrium-aluminum compound.

2-3. (Canceled)

4. (Previously presented) A component according to claim 1 wherein the metal alloy comprises an yttrium content of at least about 5% by weight.

5. (Canceled)

6. (Original) A component according to claim 1 wherein the yttrium-aluminum compound comprises yttrium aluminum oxide.

7. (Original) A component according to claim 6 wherein the yttrium-aluminum compound comprises YAG.

8. (Previously presented) A component according to claim 1 wherein the anodized surface coating comprises a thickness of from about 0.5 mils to about 8 mils.

9. (Previously presented) A component according to claim 1 wherein the metal alloy comprises a portion of an enclosure wall.

10. (Previously presented) A component according to claim 1 wherein the metal alloy comprises a portion of a wall liner.

11-28. (Cancelled)

29. (Previously presented) A substrate processing apparatus comprising:

a process chamber having a wall about a process zone;

a substrate transport capable of transporting a substrate into the process chamber;

a substrate support capable of receiving a substrate;

a gas supply capable of introducing a process gas into the process chamber;

a gas energizer capable of energizing the process gas in the process chamber; and

an exhaust capable of exhausting the process gas from the process chamber,

wherein one or more of the process chamber wall, substrate support, substrate transport, gas supply, gas energizer and gas exhaust, comprises a metal alloy comprising yttrium and aluminum, the metal alloy having an anodized surface coating formed by applying an electrical bias power to the metal alloy, wherein the anodized surface coating comprises an yttrium-aluminum compound.

30-31. (Canceled)

32. (Previously presented) An apparatus according to claim 29 wherein the metal alloy comprises an yttrium content of at least about 5% by weight.

33. (Previously presented) An apparatus according to claim 29 wherein the surface coating comprises an ion implanted coating.

34. (Original) An apparatus according to claim 29 wherein the yttrium-aluminum compound comprises yttrium aluminum oxide.

35. (Original) An apparatus according to claim 29 wherein the yttrium-aluminum compound comprises YAG.

36. (Previously presented) A component for a substrate processing chamber that is capable of being exposed to a RF or microwave energized gas, the component comprising:

a metal alloy comprising yttrium and aluminum, the metal alloy having a coating capable of being exposed to the RF or microwave energized gas in the substrate processing chamber, the coating comprising yttrium-aluminum oxide having a compositional gradient through a thickness of the coating.

37. (Previously presented) A component according to claim 36 wherein the compositional gradient continuously varies through the thickness of the coating.

38. (Previously presented) A component according to claim 36 wherein the yttrium-aluminum oxide comprises YAG.

39-42. (Cancelled)

43. (Previously presented) A component according to claim 1 wherein the integral surface coating comprises yttrium-aluminum oxide having a compositional gradient through a thickness of the coating.

44-46. (Cancelled)

47. (Previously presented) An apparatus according to claim 29 wherein the surface coating comprises yttrium-aluminum oxide having a compositional gradient through a thickness of the surface coating.

48. (Previously presented) A component for a substrate processing chamber that is capable of being exposed to a RF or microwave energized gas, the component comprising:

a structure having a coating capable of being exposed to the RF or microwave energized gas in the substrate processing chamber, the coating comprising yttrium-aluminum oxide having a compositional gradient through a thickness of the coating, the yttrium-aluminum oxide comprising YAG.

49. (Previously presented) A component according to claim 48 wherein the coating comprises an anodized coating.

50. (Previously presented) A component according to claim 48 wherein the coating comprises an ion implanted coating.

51. (Previously presented) A substrate processing apparatus comprising:

a process chamber having a wall about a process zone;

a substrate transport capable of transporting a substrate into the process chamber;

a substrate support capable of receiving a substrate;

a gas supply capable of introducing a process gas into the process chamber;

a gas energizer capable of energizing the process gas in the process chamber; and

an exhaust capable of exhausting the process gas from the process chamber,

wherein one or more of the process chamber wall, substrate support, substrate transport, gas supply, gas energizer and gas exhaust, comprises a structure having a surface coating, the surface coating comprising yttrium-aluminum oxide having a compositional gradient through a thickness of the coating.

52. (Previously presented) An apparatus according to claim 51 wherein the surface coating comprises an anodized surface coating formed by applying an electrical bias power.

53. (Currently amended) An apparatus according to claim 51 wherein the surface coating comprises an ion implanted coating.

54. (Currently amended) A component according to claim 1 wherein the component is absent a discrete boundary between the surface coating and the metal alloy.

55. (Currently amended) An apparatus according to claim 29 wherein the component is absent a discrete boundary between the surface coating and the metal alloy.

56. (Previously presented) A component according to claim 1 wherein the surface coating is adapted to be exposed to a plasma in the substrate processing chamber.

57. (Previously presented) A component according to claim 1 wherein the substrate processing chamber processes substrates by etching or depositing material on the substrates.

(Previously presented)
58. ^~~(Original)~~ A substrate processing chamber component capable of being exposed to a RF or microwave energized gas in a substrate processing chamber, the component comprising a structure comprising (i) aluminum, or (ii) a metal alloy comprising yttrium and aluminum, the structure having an ion implanted surface coating comprising an yttrium-aluminum compound.

(Previously presented)
59. ^~~(Original)~~ A component according to claim 58 wherein the structure comprises a metal alloy comprising an yttrium content of at least about 5% by weight.

(Previously presented)
60. ^~~(Original)~~ A component according to claim 58 wherein the yttrium-aluminum compound comprises yttrium aluminum oxide.

(Previously presented)
61. ^~~(Original)~~ A component according to claim 60 wherein the yttrium-aluminum compound comprises YAG.

(Previously presented)
62. ^~~(Original)~~ A component according to claim 58 wherein the ion implanted surface coating comprises a thickness of from about 0.5 mils to about 8 mils.

(Previously presented)
63. ^~~(Original)~~ A component according to claim 58 wherein the structure comprises a portion of an enclosure wall.

(Previously presented)
64. ^~~(Original)~~ A component according to claim 58 wherein the structure comprises a portion of a wall liner.